

PROCEDURE FOR OBTAINING A WATER HAULER LICENSE

License Application Form: DHS 8605

California Health and Safety Code (H&SC) Sections 111120 requires that a water hauler (WH) obtain a license issued by the Department of Health Services' Food and Drug Branch (FDB) to haul water in bulk for drinking, culinary, or other purposes involving a likelihood of being ingested by humans. You do not have to pay an additional fee for a WH license if you have a valid water bottling plant license and if the WH vehicle is based and operating at the same location as the bottling plant (H&SC Section 111120(a)). "In bulk" means containers having capacities of 250 gallons or greater. The following describes what you must do to obtain your license:

LICENSE APPLICATION

Submit a fully completed application form with the required fee. You may call the FDB Water Licensing Desk at (916) 650-6515 to receive **Form DHS 8605** by mail, or download the form from the FDB website (<http://www.dhs.ca.gov/fdb/>; "Application Instructions and Forms").

Please make sure to write your firm name (If your check does not bear the firm name), license number (If the application is for renewal of your license), and the phrase "PCA Code 85125" on your check or money order.

The license is valid for one calendar year and expires on December 31. The application must indicate the normal storage location of the hauling vehicle(s) as the place of business. The mailing address may be at a different location. The California vehicle identification number for each vehicle must be written on the application form. Proper phone numbers must be provided to expedite inspection appointments. Any incomplete and/or illegible applications will be RETURNED to the applicant.

FDB will inspect the subject vehicle(s) before issuing a license to assure that the vehicle meets the requirements specified in state and federal laws. Please contact one of the FDB offices listed on the last page of the Attachment for an appointment for inspection.

NOTE: Present your vehicle(s) for inspection at the time and location agreed upon with a Food and Drug Investigator. A certification sticker will be attached to an acceptable "Category X" vehicle at the time of inspection.

REQUIREMENTS FOR POTABLE WATER HAULING VEHICLES AND ADEQUATE OPERATION

1. Vehicle License Use Categories:

a. Water Hauling Vehicle Category B

- **Water Sources:** Licensed private water source; licensed bottling plant; regulated public (municipal) drinking water supply.
- **Users:** Licensed water bottling plant; licensed retail water facility; licensed water vending machines; food processing plant; industrial potable bulk water users; military installations.
- **Equipment:** Compliance with all equipment standard. Intake or discharge pumps need not be present on vehicle. Water may be transferred at source and destination by external hoses and pumps.
- **Exemptions:** Category B vehicles are exempted from labeling.

b. Water Hauling Vehicle Category X

- **Water Sources:** Licensed private source; regulated public drinking (municipal) water supply. NOTE: Non-community water supplies may not be used unless such sources are also licensed as private water sources by FDB.
- **Users:** Fire camps; retail bulk water distribution; emergency uses; miscellaneous uses for direct human contact or consumption (e.g., shower, baths).
- **Equipment:** Compliance with all equipment standards.
- **Exemptions:** None. All labeling requirements apply.

2. Definition of Water Hauling Vehicle:

Self propelled, or towed vehicle having an attached water tank, with or without pumps, hoses, and accessory equipment for filling or distribution of water. Tank must exceed 250 gallons capacity and must comply with all standards listed in this guideline.

Use of convertible trucks, dump trucks, or flat bed trucks with detachable tanks is allowed if the tanks are securely attached. No detached tank or vehicle without a tank will be inspected or licensed.

3. Products Allowed for Transport:

Category B: Category B haulers may haul potable water or any food product including wine, syrup, fruit concentrates, soft drink concentrates. No non-food products may be hauled under this license category.

Category X: Category X haulers may haul potable water only. No other material may be hauled.

4. Equipment Requirement:

a. General Requirements (Reference: Code of Federal Regulations (CFR), Title 21, Section 129.40):

All water contact equipment shall be suitable for its intended use, including tanks, surfaces, hoses, pumps, valves, fittings, and lubricants. All such equipment shall be constructed of non-toxic, non-absorbent material, which can be adequately cleaned and sanitized. All equipment shall be constructed so as to allow inspection and adequate sanitation of water contact surfaces.

b. Guidelines:

(1) Tank Material

- Acceptable: Stainless steel; food grade plastics; food grade epoxy coatings; glass and glass coatings; aluminum (smooth finished); copper; ceramic. The prior use of a tank must be known. If it was used for non-food purposes, DHS will require testing by an approved laboratory to assure safety. The required testing is covered below.
- Unacceptable: Non-coated steel or galvanized steel; rusted or cracked surfaces; tar, bituminous, or asbestos coatings; or coatings that are not documented as food grade. Existing equipment with galvanized steel will not be allowed unless a food grade coating has been applied to all water contact surfaces, and required curing procedures have been followed.
- Testing: Because of concerns for possible organic or inorganic chemical contamination resulting from prior non-food use of tanks, or improper selection, application, or use of coatings for tanks, testing will be required to

demonstrate that organic chemicals leaching from the tank surface will not exceed allowable levels.

To verify the concentration of any organic or inorganic chemical contaminants, the following actions shall be required:

- The water hauling tank shall be filled with potable water, and held for five days. The water shall be sampled and analyzed for organic chemicals by a laboratory certified by DHS, EPA, or other laboratory acceptable to the Department.
- A written report of the test results shall be provided to FDB.
- If any volatile organic or inorganic substance exceeds the allowable level, the tank will require corrective actions until re-sampling indicates volatile levels are below allowable levels.

Since it is difficult to correct coating problems after they are discovered, considerable care should be exercised in the selection and application of coating materials.

(2) Tank Construction

- **Openings:** Hatches and other openings, except fittings for water entry or discharge, shall be completely covered and sealed with tight fitting coverings, permanently mounted food grade gaskets, or screw or clamp fastenings, except for category B vehicles which are equipped with security locks. Water fittings shall be equipped with clamp or screw-type caps, tethered to the fittings with chain or cable. These caps shall be in position on the fittings whenever they are not used for water transfer.
- **Tank Vents:** Tank shall be vented by a downward facing, or otherwise protected vent opening of a sufficient size to allow air to replace water as it is discharged. This opening shall be protected by an adequately supported filter material capable of removing fine dust particles from the air.
- **Drain:** A bottom drain shall be provided to facilitate complete discharge of water during sanitation procedures.

(3) Vehicle Tank Filling Mechanisms

Tanks shall be filled by using a system that prevents backflow of water from the vehicle tank to the source. Either of the following methods may be used:

- Acceptable double check valves (or two consecutively connected single check valves) on the direct filling connection to the tank.
- Overhead filling through a hatch opening at the top of the tank. The filling spout must not be allowed to intrude into the tank further than two diameters of the filling pipe above the highest water level that is possible when the tank is filled. If an overhead filler pipe is mounted on the vehicle, when not being used for filling, this pipe shall be capped at each end with threaded or clamped caps, which are tethered to the fittings at the ends of the filler pipe.

(4) Pumps

Only water transfer pumps which can be readily disassembled to demonstrate the condition of the impeller and impeller chamber shall be used.

- Acceptable: Food grade pumps, constructed from stainless steel, plastic, smooth-finish aluminum or other food grade materials.

Water contact surfaces, including seals, bearing, and lubricants must be constructed from food grade materials and must be smooth, non-porous, and corrosion resistant. Acceptable food grade lubricants are usually white or pastel colored.

- Unacceptable: Any pump using non-food grade lubricant seals or bearings; porous, pitted, or corroded impellers or impeller chamber surfaces; cast iron pumps; petroleum lubricated pumps; pumps installed within the water tank.

Filling must be accomplished using acceptable source water under pressure. Drafting of surface waters is not allowed under any circumstances. Power take-off pumps will be allowed if they are properly sealed and isolated from the vehicle transmission.

When discharge or transfer pumps are used, an effective check valve shall be provided on the pump or tank discharge line, as near to the pump or tank as possible. No connections shall be located between the tank and the check valve. The check valve may be in-line or within the pump itself.

(5) Hoses

The ends of all hoses shall be provided with threaded or clamped caps. Such caps shall be in place when hoses are not in use. A tight, clean storage compartment can substitute for hose caps if the hoses are stored within the compartment at all times except during use for transfer of water.

- Acceptable: Hoses shall have approved food grade water contact surfaces prepared from plastic, synthetic rubber, metal, or other smooth non-porous material.
- Unacceptable: Rubber hoses, garden hoses, canvas fire hoses, radiator or engine cooling system hoses; surface water drafting hoses.

(6) Other Equipment on Licensed Vehicles:

Acceptable:

- Piping: Food grade plastic or acceptable metal (brass, aluminum, stainless steel, copper). No corroded steel, galvanized steel, black pipe.
- Canteen Filling Equipment: Must have effective backflow prevention (check valves), and dispensing spouts or hose bibs.
- Miscellaneous Equipment: Potable water heaters, pressure tanks, and other equipment for operation of shower and kitchen units are allowed.

Unacceptable: Spray bars unless equipped with an acceptable backflow prevention device, fire hoses and nozzles, surface water drafting equipment.

5. Labeling Requirement:

- a. The following statements must be permanently attached to or painted on the vehicle and must be fully visible and legible at all times:
 - Name and address of licensee, must appear on both sides of the tank or on both truck cab doors (if the tank is covered or located inside the vehicle, however, this statement must be on each side of truck cab doors or the outside of each side of containers) in letters of at least 2 inches in height.
 - The words "drinking water" or "potable water" must appear on both sides of the tank (if the tank is covered or located inside the vehicle, however, this statement must be on each side of truck cab doors or the outside of each side of containers) in letters of at least 4 inches in height.
 - The capacity (gallorage) of the tank must appear on both sides of the tank or on both cab doors (if the tank is covered or located inside the vehicle, this statement must be on each of truck cab doors or the outside of each side of containers) in letters of at least 2 inches in height.
- b. Category X vehicle: A sticker provided by FDB shall be affixed to the upper left quarter of the rear of the tank, and shall be visible at all times (if the tank is covered

or located inside the vehicle, the seal or sticker must be affixed to the upper left quarter of the rear of the VEHICLE). The sticker indicates that the vehicle has been inspected and found to be in compliance with applicable requirements.

6. Operational Requirement:

- a. All equipment surfaces intended for potable water contact, including source fillpoint equipment, containers, caps, tanks, hoses, valves, filters, and fittings shall be inspected, washed, rinsed, sanitized, and replaced as often as necessary to effect and maintain sanitation of such surfaces. Procedures to be used are listed in CFR 21, Section 129.80.

If household chlorine bleach (containing 5% chlorine) is to be used as a sanitizer, use 1 gallon of chlorine bleach in 1,000 gallons of water. Agitate chlorine solution thoroughly and allow contact with tank and hoses for at least 30 minutes. Run chlorine solution to waste through delivery hoses. The tank must then be thoroughly rinsed with potable water before filling.

Category B vehicle: When any food product has been hauled, the tank, hose and other equipment must be thoroughly cleaned, sanitized, and rinsed. Water samples must be collected for coliforms analysis. Licensees may haul water only if the test data shows that the water contains coliforms of less than 2.2 MPN/100 ml (or “absence” if the presence/absence test is used).

- b. Adequate cleaning and sanitizing procedures as described in Section 1 above, shall be used on hauling vehicle and associated equipment at the following times:
 - When the equipment is placed into service, when it has been unused and stored in a sealed condition for a period of 4 weeks or more, or when it hauled any food products other than water.
 - When the filled or empty tank has been exposed by open or unsealed cover caps or fittings to any condition of possible contamination of the tank or contents, including contact with dust, smoke, rain, or chemical substances.
 - When any fault or defect becomes apparent in the seals, vents, hatch doors, welds, valves, pipes, pumps, hoses, or other equipment, which may allow the water to become contaminated.
 - When bacterial analysis of the water indicates presence of coliform bacteria above 2.2 MPN/100 mL.
- c. Bacteria Testing: Hauled water samples shall be submitted to an approved water laboratory for coliform bacteria testing at the following times:

- The first water load following any of the required sanitation procedures described in part 2 above.
- At least one sample of hauled water every 30 days during months when water hauling is performed.
- Whenever such analysis is requested by state or local health authorities.

A photocopy of the test results must be forwarded to an FDB office (The original test results should be maintained by your firm).

- d. Water shall NOT be stored in the vehicle for a period of greater than one week.
 - e. The hauler shall keep a log of activities on board the vehicle including:
 - Dates of cleaning and sanitation procedures; description of processes used (cleaning agents, contact time and concentration of sanitizing agent).
 - Water sources used, dates, gallonage, and name of person who authorized/directed use of source.
 - Delivery points; dates; volumes delivered.
 - Copies of agreements, contracts, licenses, etc.
 - Test results of bacterial analyses.
7. After obtaining the license, you must do the following:
- a. Bacteria Testing: You must test water in accordance with the sampling frequency indicated in the item “6. c.” above. You must maintain the original test result report, and send a photocopy of the report to your local FDB office. The testing laboratory may send a copy of the test report directly to the local FDB office on your behalf. The laboratory must clearly identify your firm name, address, and license number on the report. You can obtain a list of certified laboratories near your location by calling DHS' Environmental Laboratory Accreditation Program (ELAP) at

(510) 540-2800 or by visiting the following ELAP website:
<http://www.dhs.ca.gov/ps/ls/ELAP/default.htm>; click on “Certified Laboratory Lists”.

Sample Collection:

Take four samples, and send all four samples to the testing laboratory (the testing laboratory may sample directly, or ask you to take the samples following its instruction for sample collection). The laboratory will randomly select one of the four samples and test for coliforms.

The laboratory can use the presence/absence (P&A) test for the coliform analysis. Only negative (absence) results are acceptable. If a sample tests positive (presence), you must resample the water (i.e., four random samples) within 24 hours and test using the multiple tube-fermentation method. If the test data shows that the water contains more than 2.2 most probable numbers (MPN)/100 ml, you must immediately stop hauling the water; investigate the cause of the problem; take corrective actions; resample/test the water; and notify FDB Water Licensing Desk. You must not haul water until the test shows that the water contains total coliforms of less than 2.2 MPN/100 ml.

- b. Record keeping: You must keep all information/test data for at least for 2 years pursuant to the Title 21, Code of Federal Regulations, Section 129.80 (h). Refer to the Section regarding the types of information to be kept.
- c. You must inform FDB when any changes are made in the design or construction of your water hauling tank or equipment.

FOOD AND DRUG BRANCH OFFICES

FDB Food Safety Inspection Unit-Northern Region

100 Paseo de San Antonio, Room 304, San Jose, CA 95113
Telephone: (408)277-1832; Fax: (408) 277-1141

FDB Food Safety Inspection Unit-Southern Region

1449 West Temple Street, Room 224, Los Angeles, CA 90026
Telephone: (213) 580-5720; Fax: (213) 580-5750

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